

BOOK REVIEW

DONALD A. COX. 2002. **A Naturalist's Guide to Wetland Plants: An Ecology for Eastern North America.** Illustrations by Shirley A. Peron. (ISBN 0-8156-0740-7, pbk.) Syracuse University Press. 621 Skytop Road, Suite 110, Syracuse, NY 13244-5290. (Orders: 315-443-2597, Fax: 315-443-5545, supress@sy.edu) \$17.95, 203 pp, 123 line drawings, 6" × 9".

Once viewed as wastelands, wetlands are now better appreciated by the public for the value they bring to human life. By some estimates, wetlands once covered more than 200 million acres in the United States. Yet, nearly half of these valuable ecosystems were destroyed by the 1950's for use in agriculture and land development. Recent legislation seeks to protect wetlands and associated biota, yet these ecosystems continue to be destroyed, albeit at a slower rate, and wetland species become threatened or endangered. This book focuses on palustrine wetlands, i.e. marshes, bogs, and swamps and within the first few pages raises the reader's awareness of the value of wetlands.

Beginning, appropriately, with a definition of wetlands as ecosystems, Cox enumerates in the first chapter the value of wetlands as habitat for biota, flood protection, recreation and groundwater recharge, among others. The introduction also touches on wetland productivity and nutrient cycling, with emphasis on carbon dioxide and global climate change due to the burning of fossil fuels. In latter half of the first chapter, some major wetlands in North America are described—the Atchafalaya Swamp, Cranberry Glades of West Virginia, the Everglades, the Great Dismal Swamp, Okefenokee, the Pocosins and prairie pothole marshes. Information about each wetland details geography, dominant vegetation, and historical and current ranges. The next five chapters emphasize the plants that grow in wetlands. Chapter two, entitled Types of Plants, explores the different forms of plant life in wetlands or for that matter, any ecosystem on the planet. Details on the life history and general characteristics of algae, fungi, slime molds, lichens, bryophytes, ferns and allies, gymnosperms and angiosperms are provided. In the next chapter, Strategies for Survival, the author presents pollination syndromes, seed dispersal mechanisms, and adaptations for water in wetland plants. Chapters on marshes and swamps and bogs and peatlands focus primarily on the vascular plants growing there. Though illustrations are scattered throughout the book, more are presented here to enhance the plant descriptions.

In the chapter, Plants of Special Interest, the amount information on poisonous plants far outweighs the details on hallucinogenic and edible plants. In fact, only one hallucinogenic plant is mentioned, sweetflag or *Acorus calamus*, and I found myself wondering about the merit of listing this plant in its own heading because of its psychoactive properties. Perhaps it would have been better served in the medicinal plants section since Native Americans used it to treat some physical ailments.

Transitions in the physical characteristics of wetlands due to seasonal climate change are discussed in chapter seven, Through the Year. Noxious aquatic weeds are also considered in some detail here. The author provides tips on collecting, preserving and identifying plants, including sound advice on where and what not to collect, obtaining permission from land owners prior to collecting and how to collect good, representative specimens. In the final chapter, suggested activities on wetlands, such as making a study on the life history of a plant or investigating the characteristics of a local wetland, encourage readers to learn more.

This book raises awareness regarding the importance of wetlands. The dynamic attributes of ecosystems and interconnected nature of wetland biota is stressed throughout. Clarity and brevity of Cox's writing style makes this book relevant to nearly all groups of people—naturalists, educators, college students, amateurs interested in birds, amphibians, reptiles or plants. Emphasis on conservation and habitat preservation make this book especially valuable.—Amy Trauth Nare, *Botanical Research Institute of Texas*, 509 Pecan Street, Fort Worth, TX 76102, U.S.A., amy_trauth@yahoo.com.